

CLAIMS

1. A fastener adapted to affix a first article to a second article, comprising:

a first engaging surface having a maximum diameter adapted to engage an interior surface of an opening in the first article; and

a mating surface adapted to mate with the second article.

2. The fastener of claim 1 wherein said first engaging surface is adapted to engage a longitudinally oriented opening within said first article.

3. The fastener of claim 2 wherein said fastener is adapted to affix said first article at an angle to said second article.

4. The fastener of claim 3 wherein said angle is a right angle.

5. The fastener of claim 4 wherein said angle is acute.

6. The fastener of claim 1 wherein said first engaging surface has cross-sectional shape selected from the group consisting of rectangular, pentagonal, hexagonal, octagonal and other regular polygons having at least four sides.

7. The fastener of claim 1 wherein said first engaging surface includes a plurality of ridges adapted to frictionally engage the opening in the first article.

8. The fastener of claim 7 wherein said first engaging surface has shape selected from the group consisting of cylindrical, ellipsoidal, conical, elliptic conical frustum, pyramidal frustum, and ball.

9. The fastener of claim 8 wherein said first engaging surface includes a plurality of ridges adapted to frictionally engage the opening in the first article.

10. The fastener of claim 9 wherein said mating surface is adapted to engage an interior surface of an opening in the second article.

11. The fastener of claim 10 wherein said mating surface includes a plurality of ridges adapted to frictionally engage the opening in the second article.

12. The fastener of claim 10 wherein said mating surface includes a plurality of threads adapted to engage the opening in the second article.

13. The fastener of claim 10 wherein said mating surface has shape selected from the group consisting of cylindrical, ellipsoidal, conical, elliptic conical frustum, pyramidal frustum, and ball.

14. The fastener of claim 8 wherein said mating surface is flat, whereby said fastener is adapted to be affixed to a flat surface of said second article.

15. The fastener of claim 14 further comprising affixing means including at least one selected from the group

consisting of bolthead, aperture having a regular polygonal cross-section, protrusion having regular polygonal cross-section, and countersink.

16. The fastener of claim 14 wherein the fastener is adapted to be hidden from view after the first article is fastened to the second article therewith.

17. A fastener adapted to engage a longitudinally oriented opening of a first elongated article for attaching the first elongated article at a right angle to a second article, said fastener comprising:

a cylindrical member provided with a first engaging surface for engaging an interior surface of a first one of the first elongated article and the second article; and
a second member connected to the cylindrical member at an opposing end, the second member provided with a second engaging surface for engaging an interior surface of a second one of the first article and the second article, such that said fastener is adapted to be hidden from view after the first elongated article is fastened to the second article therewith.

18. A method of affixing a picket of a plurality of pickets at an angle to a first rail and to a second rail to form a railing, comprising:

a) engaging an interior surface of a longitudinally oriented opening of a first end of a picket with a first fastener having a first engaging surface;

b) affixing a mating surface of the first fastener to a corresponding surface of a first rail;

c) engaging an interior surface of a longitudinally oriented opening of a second end of the picket with a second fastener having a first engaging surface; and

d) affixing a mating surface of the second fastener to a corresponding surface of a second rail, such that the picket is affixed to the first and second rails by the first and second fasteners and the first and second fasteners are thereafter hidden from view.

19. The method of claim 18 wherein said angle is a right angle.

20. The method of claim 18 wherein said angle is an acute angle.

21. The method of claim 18 wherein said first engaging surface has shape selected from cylindrical, ellipsoidal, conical, elliptic conical frustum, pyramidal frustum, and ball and other shapes having cross-sections of rectangular, pentagonal, hexagonal, octagonal and other regular polygons having at least four sides.

22. The method of claim 21 wherein the first engaging surface includes a plurality of ridges adapted to frictionally engage the longitudinal opening in the picket.

23. The method of claim 22 wherein the mating surface is flat such that said fastener mates with a flat surface of said first and second rails.

24. A method of affixing a plurality of pickets at an angle to a first rail and to a second rail to form a railing, comprising:

- e) engaging an interior surface of a longitudinally oriented opening of a first end of a picket with a first fastener having a first engaging surface;

- f) affixing a mating surface of the first fastener to a corresponding surface of a first rail;

- g) engaging an interior surface of a longitudinally oriented opening of a second end of the picket with a second fastener having a first engaging surface;

- h) affixing a mating surface of the second fastener to a corresponding surface of a second rail; and

- i) performing steps a) through d) for each of the plurality of pickets,

such that the plurality of pickets are affixed to the first and second rails by a plurality of each of the first and second fasteners and the first and second fasteners are thereafter hidden from view.

25. A railing including a plurality of pickets affixed at an angle on a first end to a first rail and on a second end to a second rail, each of the plurality of pickets being affixed to the first and the second rails by a method comprising:

- a) engaging an interior surface of a longitudinally oriented opening of a first end of a picket with a first fastener having a first engaging surface;

- b) affixing a mating surface of the first fastener to a corresponding surface of a first rail;

c) engaging an interior surface of a longitudinally oriented opening of a second end of the picket with a second fastener having a first engaging surface; and

d) affixing a mating surface of the second fastener to a corresponding surface of a second rail.